

P21 – IRONMONGERY – DOORS AND WINDOWS**IRA-NH[P21]0001**

Rev	Summary of Changes	Author	Date	Check	Status
E00	First draft	AS	10.03.08		Draft
F00	Issued for Tender	CR	16.09.08	AS	Stage F
K00	Issued for Construction Clauses 010 and 565 deleted. Manufacturer's contacts added. Clauses 140, 380, 592, 593, 596, 670 and 691 added. Otherwise changes as in red.	AC	03.04.09	AS	Stage K
K01	Clause 451 added.	AC	17.04.09	AS	STAGE K
K02	Clause 130, 131 and 140 revised to reflect free issue of items from IZE.	TM	20.05.09	AS	STAGE K

P21 IRONMONGERY – DOORS AND WINDOWS

To be read with:

- Preliminaries/ General conditions.
- Ironmongery Schedule IRAL-NH[P21]1001-D
- Ironmongery Schedule IRAL-NH[P21]1001-W
- Door Schedule IRAL-2400 and IRAL-2401
- Drawings: IRAL-241x series, IRAL-242x series, IRAL-245x series, IRAL-2235 and IRAL-2236, IRAL-23xx series

GENERAL**120 COORDINATION**

- Door manufacturer to confirm compatibility of all ironmongery items in each set.
- Door Manufacturer to coordinate ironmongery with door construction.
- Door Manufacturer to confirm compatibility of electrical and security accessories with installed ironmongery sets.
- Full ironmongery list by main contractor with left and right handed ironmongery sets clearly identified to be approved by CA before door fabrication and order of ironmongery.
- Contractor to coordinate security requirements with door manufacturer.

130 IRONMONGERY SUPPLIERS

- Source: Obtain ironmongery from sources listed in the ironmongery schedule.
- Source contact details:

Allgood plc
297 Euston Road
London
NW1 3AQ
T: 020 7387 9951
F: 020 7383 7950
<http://www.allgood.co.uk>

Dorma Group
Wilbury Way
Hitchin
Hertfordshire
SG4 0AB
T: 01462 477600
F: 01462 477601
<http://www.dorma-uk.co.uk>

Hafele UK Ltd.
Swift Valley Industrial Estate
Rugby
CV21 1RD
T: 01788 542020
F: 01788 544440
<http://www.hafele.com/uk/>

Lorient Polyproducts Ltd
Endeavour House
Fairfax Road
Heathfield Ind Est
Newton Abbot
Devon TQ12 6UD
T: 01626 834252
F: 01626 833166

<http://www.lorientuk.com>

Zero Seal Systems Ltd
Unit 6 Ladford Covert
Seighford, Stafford
ST18 9QG
T: 01785 282910
F: 01785 282498
<http://www.zeroplus.co.uk>

IZE – Refer to Clause 131 for supply by Employer.

Riverbank House
1 Putney Bridge Approach
London
SW6 3JD
T: 0207384 3302
F: 0207384 3264

Glutz UK Ltd.
11 Finch Drive
Springwood Industrial Estate
CM7 2SF Braintree
+44 1376 348 808
+44 1376 348 848
<mailto:info@glutz.co.uk>
<http://www.glutz.co.uk/>

131 FREE ISSUE SUPPLY

- **The following Ironmongery Items are to be supplied by the Employer, Installed by the Contractor.**
 - **Entrance Pull Handle 01**
 - **Pull Handle 01**
 - **Lever Handle 01 on square 50x50 rose**
 - **Lever Handle 01 on rectangular Europrofile rose**
 - **Lever Handle 01 on rectangular blanking rose**
 - **Lever Handle 01 on rectangular bathroom rose**
 - **Lever Handle 01 on rectangular rose with indicator**
 - **Flush Pull 01**
 - **Escutcheon 01**
 - **Blanking Rose 01**
 - **Coat Hook 01**
 - **Item IZE IRT01.SPSS.BBT.01 (part of Cylinder Turn 01)**
 - **Installation of turn on Contractor supplied Allgood cylinder by contractor.**
- **Installation is to be in accordance with the specifications and drawings.**

140 SAMPLES

- Provide labelled samples of all ironmongery items, include all visible screws. **To exclude items listed under Clause P21/131**
 - Provide min 50x50mm sample of finish of P21/691.
 - Conformity: Retain samples on site in an approved location for the duration of the contract.
- Ensure conformity of ironmongery as delivered with labelled samples

141 SAMPLE BOARDS

- General: Before placing orders with suppliers submit the following ironmongery items installed into the door samples as specified in L20/170.
- Install the following ironmongery items into the small version of Door type 02:
 - 2 hinges - Allgood 8066 CB
 - 1 Pull handle - as per Ironmongery set 15-D
 - 1 Push plate - as per Ironmongery set 32-D
 - 1 Flush pull - as per Ironmongery Set 32-D
 - 1 Lever handle on rectangular bathroom rose including thumb turn - as per Ironmongery set 07-D
 - 1 Lever handle on rectangular rose with indicator - as per Ironmongery set 07-D
 - Compression seal to frame - Zero S188
 - Intumescent fire and smoke seal in door leaf rebate - as per Ironmongery set 11-D
 - Automatic dropped threshold seal - Lorient IS8010 si
 - Kicking plate on one side only – per P21/690
- Conformity: Retain board on site in an approved location for the duration of the contract. Ensure conformity of ironmongery as delivered with labelled samples
- Install the following ironmongery items into the small version of Door type 03:
 - 2 hinges - Allgood 8080CB
 - Pair of lever handles on roses with fixed to an associated latch set, cylinder, escutcheons and strike plate - as per Ironmongery set 20-D
 - Compression seal in frame - Zero S188
 - Intumescent fire and smoke seal in door leaf rebate - Lorient 2006
 - Automatic dropped threshold seal - Lorient IS8010 si

160 SHOP DRAWINGS

- All Ironmongery to be shown on Door shop drawings per L20/180.
- Visible fixings to be clearly indicated on shop drawings. Visible fixings of roses and escutcheons to be on the pull side of doors unless stated otherwise.

170 IRONMONGERY FOR FIRE DOORS

- Relevant products: Ironmongery fixed to, or morticed into, the component parts of a fire resisting door assembly.
- Compliance: Ironmongery included in successful tests to BS 476-22 or BS EN 1634-1 on door assemblies similar to those proposed.
 - Submit CERTIFIRE certificates.
 - Submit Evidence of successful testing by UKAS accredited laboratory.
- Hinges, closers, electromagnetic devices, door coordinators, emergency exit devices and panic exit devices to doors on escape routes and fire/ smoke control doors are to be CE marked.
- Melting point of components (except decorative non functional parts): 800°C minimum.

180 CATEGORY OF DUTY FOR DOOR IRONMONGERY

- Standard: To DD 171.
 - Category of duty of doors: minimum Medium Duty (MD).
- General: Durability of ironmongery components to be compatible with stated category of duty of each door leaf.
 - Exclusions: Ironmongery with specific duty or 'category of use' defined elsewhere.
 - Documentation: Before placing orders with suppliers submit documentation showing product compliance with stated category of duty.

GENERAL REQUIREMENTS

300 PERFORMANCE:

- Contractor to alert CA if ironmongery listed in the schedules can not achieve compliance with the standards listed in P21/180 and P21/310 through P21/651.

310 HINGES

- To BS EN 1935.
- Hinges to doors on escape routes and fire/smoke control doors: CE marked.
- Product reference: see ironmongery schedule IRAL-NH[P21]-1001-D
- 350 DOOR TRACK AND RUNNING GEAR
 - To BS EN 1527
 - Operation: Smooth and quiet.
 - Safety: Doors not able to come off track when in use.
 - Product reference: see ironmongery schedule IRAL-NH[P21]-1001-D

- 365 WINDOW HINGES
 - To BS EN 1935
 - Product reference: see ironmongery schedule IRAL-NH[P21]-1001-W

- 380 SLIDING FRICTION STAY HINGES
 - Product reference: see ironmongery schedule IRAL-NH[P21]-1001-W

- 395 BOXED SASH WINDOWS
 - Weights: Matched to weights of glazed sashes.

DOOR OPERATING DEVICES

- 410 OVERHEAD DOOR CLOSERS AND FLOOR SPRINGS
 - To BS EN 1154
 - Operational adjustment:
 - Variable power: Matched to size, weight and location of doors.
 - Latched doors: Override latches and/ or door seals when fitted.
 - Unlatched doors: Hold shut under normal working conditions unless scheduled or noted on drawings otherwise.
 - Closing against smoke seals of fire doors: Positive. No gaps.
 - Door closing devices to fire/smoke control doors: CE marked
 - Product reference: see ironmongery schedule IRAL-NH[P21]-1001-D

- 451 CUSTOM MADE FLOOR SPRING COVER PLATE
 - Description: Custom made floor spring cover plates to suit door closers as specified in Ironmongery schedule IRAL-NH[P21]1001-D
 - Location: Refer to Ironmongery schedule
(For doors: ED-G06-1, ED-B11-1 & D-G05-1)
 - Manufacturer: Dorma/Security Clousers
10-11 Heybridge Way,
Off Lea Bridge Road,
LEYTON, London,
E10 7NQ
T: 020785589350
 - Material: Grade 316S11stainless steel
 - Thickness: 3 mm
 - Sizes:
 - Width: As per detail drawings and to suit floor spring as specified in Ironmongery schedule IRAL-NH[P21]1001-D. For detailed drawings refer to IRAL-01/2440, IRAL-02/2440& IRAL-01/2452.
 - Length: As per standard cover plate and to suit floor spring as specified in Ironmongery schedule IRAL-NH[P21]1001-D.
 - Finish : Satin stainless steel.
 - Final Finish : Controlled shot peened refer to Z35/153.
1mm chamfered edges to top surface. (Prior to shot-peening)
 - Fixing: With stainless steel c/s screws and to suit floor spring. Screw heads to match screws of threshold where occurs.
 - Metalwork: as section Z11

- Interfaces: Stone floor finishes M40/120
Thresholds: P20/151, P20/155

- 471 ELECTROMAGNETIC HOLD OPEN/ SWING-FREE DEVICES (24 V)
 - To BS EN 1155
 - Minimum classification grades:
 - Category of use: 3.
 - Suitability for use on fire/ smoke doors: 1.
 - Safety: 1.
 - Means of release: Alarm system and/ or failure of power supply.
 - Test switch: Located in a convenient position in electrical cupboard, switch clearly marked or located as otherwise indicated on drawings.
 - Operational adjustment of integral closer:
 - Variable power: Matched to size, weight and location of doors.
 - Latched doors: Override latches and/ or door seals when fitted.
 - Unlatched doors: Hold shut under normal working conditions.
 - Product reference: see ironmongery schedule IRAL-NH[P21]-1001-D

- 481 DOOR COORDINATORS
 - To BS EN 1158
 - Minimum classification grades:
 - Category of use: 3.
 - Safety: 1.
 - Application: To all single swing double doors with rebated meeting stiles and fitted with self closers.

- DOOR SECURING DEVICES**

- 510 THIEF RESISTANT DOOR LOCKS
 - To BS 3621 and Kitemarked
 - Product reference: see ironmongery schedule IRAL-NH[P21]-1001-D

- 515 DOOR LOCKS
 - To BS EN 12209.
 - Product reference: see ironmongery schedule IRAL-NH[P21]-1001-D

- 540 DOOR LATCHES
 - To BS EN 12209.
 - Latch spring strength: Select to prevent unsprung lever handles drooping.
 - Product reference: see ironmongery schedule IRAL-NH[P21]-1001-D

- 571 EMERGENCY EXIT DEVICES
 - To BS EN 179.
 - Minimum classification grades:
 - Category of use: 3.
 - Safety: 1.

- 577 PANIC EXIT DEVICES
 - To BS EN 1125.
 - Minimum classification grades:
 - Category of use: 3.
 - Safety: 1.
 - Security: 2.

- 582 DOOR BOLTS
 - To BS EN 12051.

- 586 PRIVACY INDICATOR
- Emergency release facility: Required.

WINDOW SECURING DEVICES

- 592 SASH FASTENERS
- Product reference: see ironmongery schedule IRAL-NH[P21]-1001-W

- 593 SASH SCREWS
- Product reference: see ironmongery schedule IRAL-NH[P21]-1001-W

- 596 CASEMENT/SASH MORTICE BOLTS
- Product reference: see ironmongery schedule IRAL-NH[P21]-1001-W

DOOR FURNITURE

- 610 LEVER HANDLES
- To BS EN 1906.
- Product reference: see ironmongery schedule IRAL-NH[P21]-1001-D
- Mounting per drawings

- 620 DOOR KNOBS
- To BS EN 1906.
- Product reference: see ironmongery schedule IRAL-NH[P21]-1001-D
- Mounting per drawings

- 641 PULL HANDLES
- To BS 8424.
- Minimum classification grades:
- - Durability: 2.
- - Safety: 1.
- Product reference: see ironmongery schedule IRAL-NH[P21]-1001-D
- Mounting per drawings

- 670 PUSH PLATES
- Description: Stainless steel push plate at timber doors.
- Material: Stainless steel to BS EN 0088-2, grade 1.4401 (BS 1449:Part 2, grade 316) refer Z11/200.
- Size: Per ironmongery schedule IRAL-NH[P21]-1001-D
- Finish: Shot peened to Z35/152 or as noted otherwise.
- Edges: Provide a 1mm radius to the four edges of the outside face prior to shot peening.
- Holes: Countersunk holes in plate at each corner to accept fixing.
- Fixing: A4-70 grade countersunk stainless steel wood screws to pre-drilled holes in timber door, one in each corner. Screws to CA approval.

- 690 KICK PLATES
- Description: Stainless steel kick plate rebated flush into timber doors.
- Material: Stainless steel to BS EN 0088-2, grade 1.4401 (BS 1449:Part 2, grade 316) refer Z11/200.
- Size: 115mm high x full width of door x 2mm thick.
- Finish: Shot peened to Z35/152.
- Edges: Provide a 1mm radius to the four edges of the outside face prior to shot peening.
- Holes: Countersunk holes in plate at each corner to accept fixing.
- Fixing: A4-70 grade countersunk stainless steel wood screws to pre-drilled holes in timber door, one in each corner.
- Tolerance: Maximum allowable deviation from flat: 1mm across width of door.

691 TROLEY PLATE

- Description: Stainless steel trolleyplate at timber doors.
- Material: Stainless steel to BS EN 0088-2, grade 1.4401 (BS 1449:Part 2, grade 316) refer Z11/200.
- Size: Per ironmongery schedule IRAL-NH[P21]-1001-D
- Finish: Satin Stainless steel.
- Edges: Provide a 1mm radius to the four edges of the outside face prior to shot peening.
- Holes: Countersunk holes in plate at each corner to accept fixing.
- Fixing: A4-70 grade countersunk stainless steel wood screws to pre-drilled holes in timber door, one in each corner. Screws to CA approval.
- Tolerance: Maximum allowable deviation from flat: 1mm across width of door.

End of P21